## (19) World Intellectual Property Organization International Bureau





(43) International Publication Date 16 June 2005 (16.06.2005)

**PCT** 

## (10) International Publication Number WO 2005/054225 A1

(51) International Patent Classification<sup>7</sup>: C07D 333/64, 307/83, A61K 31/381, 31/343

(21) International Application Number:

PCT/EP2004/012075

(22) International Filing Date: 26 October 2004 (26.10.2004)

(25) Filing Language:

English

(26) Publication Language:

English

FR

(30) Priority Data:

(71) Applicant (for all designated States except US): MERCK PATENT GMBH [DE/DE]; Frankfurter Strasse 250, 64293 Darmstadt (DE).

20 November 2003 (20.11.2003)

(72) Inventors; and

0313612

- (75) Inventors/Applicants (for US only): MOINET, Gérard [FR/FR]; 15, rue Lamartine, F-91400 Orsay (FR). LERICHE, Caroline [FR/FR]; 53, rue de l'Abbé Carton, F-75014 Paris (FR). KERGOAT, Micheline [FR/FR]; 5, Villa des Bois, F-91440 Bures-sur-Yvette (FR).
- (74) Common Representative: MERCK PATENT GMBH; Frankfurter Strasse 250, 64293 Darmstadt (DE).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## **Published:**

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANTIDIABETIC COMPOUNDS COMPRISING BENZOFURAN AND BENZOTHIOPHENE DERIVATIVES

$$R5$$
 $R6$ 
 $R2$ 
 $R4$ 
 $R3$ 
 $R6$ 
 $R2$ 
 $R3$ 
 $R1$ 

(57) Abstract: The invention relates to compounds of the general formula (I) in which R1, R2, R3, R4, R5, R6 and X are as defined in Claim 1. These compounds can be used in the treatment of pathologies associated with insulin resistance syndrome.